



CONTINUUM™ DMDE-6620 NT 7 HEALTH+™ BIMODAL

Bimodal Polyethylene Resin

Overview

CONTINUUM™ DMDE-6620 NT 7 HEALTH+™ Bimodal High Density Polyethylene Resin is produced by UNIPOL™ II process technology. This resin is a high stiffness resin with superior top-load performance in conjunction with excellent environmental stress crack resistance and excellent gas barrier properties. CONTINUUM™ DMDE-6620 NT 7 HEALTH+™ Bimodal is specifically designed for use in multiple types of blow molding processes, producing containers up to 20 gallons in size, which require superior top-load combined with excellent environmental stress crack resistance and gas barrier properties. This product offers excellent processability with low plate out properties. This product is especially well suited for containers used to package health care and pharmaceutical products.

- High stiffness for superior top-load performance
- Excellent environmental stress crack resistance
- Excellent gas barrier properties
- High impact strength
- Good extrusion characteristics

Complies with:

- U.S. FDA 21 CFR 177.1520 (c) 3.2a
- U.S. FDA DMF
- U.S. USP Class VI
- Canadian HPFB No Objection
- EU, No 10/2011

Consult the regulations for complete details.

Additive

- Antiblock: No
- Slip: No
- Processing Aid: Yes

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|-------------------------|-------------------------|-------------|
| Density | 0.960 g/cm ³ | 0.960 g/cm ³ | ASTM D792 |
| Base Density ¹ | 0.958 g/cm ³ | 0.958 g/cm ³ | Dow Method |
| Melt Index | | | ASTM D1238 |
| 190°C/2.16 kg | 0.28 g/10 min | 0.28 g/10 min | |
| 190°C/21.6 kg | 27 g/10 min | 27 g/10 min | |
| Environmental Stress-Cracking Resistance (ESCR) | | | ASTM D1693 |
| 122°F (50°C), 10% Igepal, F50 | 220 hr | 220 hr | |
| 122°F (50°C), 100% Igepal, F50 | > 1100 hr | > 1100 hr | |
| Mechanical | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Strength | | | ASTM D638 |
| Yield | 4060 psi | 28.0 MPa | |
| Break | 2610 psi | 18.0 MPa | |
| Tensile Elongation | | | ASTM D638 |
| Yield | 8.0 % | 8.0 % | |
| Break | 670 % | 670 % | |
| Flexural Modulus - 2% Secant | 170000 psi | 1170 MPa | ASTM D790B |
| Hardness | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Durometer Hardness (Shore D) | 59 | 59 | ASTM D2240 |
| Thermal | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed | 180 °F | 82.0 °C | |
| Brittleness Temperature | -76.0 °F | -60.0 °C | ASTM D746 |
| Vicat Softening Temperature | 268 °F | 131 °C | ASTM D1525 |
| Melting Temperature (DSC) | 271 °F | 133 °C | Dow Method |
| Peak Crystallization Temperature (DSC) | 250 °F | 121 °C | Dow Method |



Additional Information

Plaque molded and tested in accordance with ASTM D4976.

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Base density is estimated using the assumption that every 1000 ppm of antiblock in the finished product raises the density of the polymer by 0.0006 g/cm³. Base density is the estimated density of the polymer if it did not contain any antiblock.

